

N/A

1646

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/431,888A

DATE: 02/23/2000
TIME: 13:57:59

Input Set: I431888A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

P.S. HGP

1 <110> APPLICANT: Wise, Lyn M
2 Mercer, Andrew A
3 Savory, Loreen J
4 Fleming, Stephen B
5 Stacker, Stephen
6 <120> TITLE OF INVENTION: VASCULAR ENOTHELIAL GROWTH FACTOR-LIKE PROTEIN FROM ORF
7 VIRUS NZ2 BINDS AND ACTIVATES MAMMALIAN VEGF
8 RECEPTOR-2, AND USES THEREOF
9 <130> FILE REFERENCE: Sequence Listing for 09/431,833
10 <140> CURRENT APPLICATION NUMBER: US/09/431,888A
11 <141> CURRENT FILING DATE: 1999-11-02
12 <150> EARLIER APPLICATION NUMBER: 60/106,689
13 <151> EARLIER FILING DATE: 1998-11-02
14 <150> EARLIER APPLICATION NUMBER: 60/106,800
15 <151> EARLIER FILING DATE: 1998-11-03
16 <160> NUMBER OF SEQ ID NOS: 11
17 <170> SOFTWARE: PatentIn Ver. 2.0
18 <210> SEQ ID NO 1
19 <211> LENGTH: 402
20 <212> TYPE: DNA
21 <213> ORGANISM: Orf virus
22 <400> SEQUENCE: 1
23 atgaagtgtc tcgtcggcat actagtagcc gtgtgcttgc accagtatct gctgaacgcg 60
24 gacagcaaca cgaaaggatg gtccgaagtg ctgaaaggca gcgagtcaa gcctaggccg 120
25 attgttggtc ctgtaagcga gacgcacca gagctgactt ctcagcggtt caaccgcgcg 180
26 tgtgtcacgt tgatgcgatg cggcgggtgc tgcaacgacg agagcttgga atgcgtcccc 240
27 acggaagaag taaacgtgac gatggaactc ctgggggcgt cgggctccgg tagtaacggg 300
28 atgcaacgtc tgagcttcgt agagcataag aaatgcgatt gtagaccacg attcacaacc 360
29 acgccaccga cgaccacaag gccgcccaga agacgccgct ag 402
30 <210> SEQ ID NO 2
31 <211> LENGTH: 133
32 <212> TYPE: PRT
33 <213> ORGANISM: Orf virus
34 <400> SEQUENCE: 2
35 Met Lys Leu Leu Val Gly Ile Leu Val Ala Val Cys Leu His Gln
36 1 5 10 15
37 Leu Leu Asn Ala Asp Ser Asn Thr Lys Gly Trp Ser Glu Val Leu Lys
38 20 25 30
39 Gly Ser Glu Cys Lys Pro Arg Pro Ile Val Val Pro Val Ser Glu Thr
40 35 40 45
41 His Pro Glu Leu Thr Ser Gln Arg Phe Asn Pro Pro Cys Val Thr Leu
42 50 55 60
43 Met Arg Cys Gly Gly Cys Cys Asn Asp Glu Ser Leu Glu Cys Val Pro
44 65 70 75 80

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MAR-9 2000
TC 1650 MAIL ROOM

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/431,888A

DATE: 02/23/2000
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Input Set: I431888A.RAW

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45      Thr Glu Glu Val Asn Val Thr Met Glu Leu Leu Gly Ala Ser Gly Ser
46                      85                      90                      95
47      Gly Ser Asn Gly Met Gln Arg Leu Ser Phe Val Glu His Lys Lys Cys
48                      100                      105                      110
49      Asp Cys Arg Pro Arg Phe Thr Thr Thr Pro Pro Thr Thr Thr Arg Pro
50                      115                      120                      125
51      Pro Arg Arg Arg Arg
52      130
53 <210> SEQ ID NO 3
54 <211> LENGTH: 147
55 <212> TYPE: PRT
56 <213> ORGANISM: Homo sapiens
57 <400> SEQUENCE: 3
58      Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu Leu
59      1                      5                      10                      15
60      Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala Glu Gly
61                      20                      25                      30
62      Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln
63                      35                      40                      45
64      Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu
65                      50                      55                      60
66      Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu
67      65                      70                      75                      80
68      Met Arg Cys Gly Gly Cys Ser Asn Asp Glu Gly Leu Glu Cys Val Pro
69                      85                      90                      95
70      Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His
71                      100                      105                      110
72      Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys
73                      115                      120                      125
74      Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Asn Cys Asp Lys
75      130                      135                      140
76      Pro Arg Arg
77      145
78 <210> SEQ ID NO 4
79 <211> LENGTH: 191
80 <212> TYPE: PRT
81 <213> ORGANISM: Homo sapiens
82 <400> SEQUENCE: 4
83      Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu Leu
84      1                      5                      10                      15
85      Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala Glu Gly
86                      20                      25                      30
87      Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln
88                      35                      40                      45
89      Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu
90      50                      55                      60
91      Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu
92      65                      70                      75                      80
93      Met Arg Cys Gly Gly Cys Ser Asn Asp Glu Gly Leu Glu Cys Val Pro
94                      85                      90                      95

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151600 MAIL ROOM

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RAW SEQUENCE LISTING
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Input Set: I431888A.RAW

```

95      Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His
96                100                105                110
97      Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys
98                115                120                125
99      Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Asn Pro Cys Gly
100      130                135                140
101     Pro Cys Ser Glu Arg Arg Lys His Leu Phe Val Gln Asp Pro Gln Thr
102     145                150                155                160
103     Cys Lys Cys Ser Cys Lys Asn Thr His Ser Arg Cys Lys Ala Arg Gln
104                165                170                175
105     Leu Glu Leu Asn Glu Arg Thr Cys Arg Cys Asp Lys Pro Arg Arg
106                180                185                190

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<210> SEQ ID NO 5

<211> LENGTH: 170

<212> TYPE: PRT

<213> ORGANISM: Homo sapiens

<400> SEQUENCE: 5

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112     Met Pro Val Met Arg Leu Phe Pro Cys Phe Leu Gln Leu Leu Ala Gly
113      1                5                10                15
114     Leu Ala Leu Pro Ala Val Pro Pro Gln Gln Trp Ala Leu Ser Ala Gly
115                20                25                30
116     Asn Gly Ser Ser Glu Val Glu Val Val Pro Phe Gln Glu Val Trp Gly
117                35                40                45
118     Arg Ser Tyr Cys Arg Ala Leu Glu Arg Leu Val Asp Val Val Ser Glu
119                50                55                60
120     Tyr Pro Ser Glu Val Glu His Met Phe Ser Pro Ser Cys Val Ser Leu
121                65                70                75                80
122     Leu Arg Cys Thr Gly Cys Cys Gly Asp Glu Asp Leu His Cys Val Pro
123                85                90                95
124     Val Glu Thr Ala Asn Val Thr Met Gln Leu Leu Lys Ile Arg Ser Gly
125                100                105                110
126     Asp Arg Pro Ser Tyr Val Glu Leu Thr Phe Ser Gln His Val Arg Cys
127                115                120                125
128     Glu Cys Arg Pro Leu Arg Glu Lys Met Lys Pro Glu Arg Arg Arg Pro
129                130                135                140
130     Lys Gly Arg Gly Lys Arg Arg Glu Asn Gln Arg Pro Thr Asp Cys
131     145                150                155                160
132     His Leu Cys Gly Asp Ala Val Pro Arg Arg
133                165                170

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<210> SEQ ID NO 6

<211> LENGTH: 188

<212> TYPE: PRT

<213> ORGANISM: Homo sapiens

<400> SEQUENCE: 6

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139     Met Ser Pro Leu Leu Arg Arg Leu Leu Leu Ala Ala Leu Leu Gln Leu
140      1                5                10                15
141     Ala Pro Ala Gln Ala Pro Val Ser Gln Pro Asp Ala Pro Gly His Gln
142                20                25                30
143     Arg Lys Val Val Ser Trp Ile Asp Val Tyr Thr Arg Ala Thr Cys Gln
144                35                40                45

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```

145   Pro Arg Glu Val Val Val Pro Leu Thr Val Glu Leu Met Gly Thr Val
146       50                               55                               60
147   Ala Lys Gln Leu Val Pro Ser Cys Val Thr Val Gln Arg Cys Gly Gly
148       65                               70                               75                               80
149   Cys Cys Pro Asp Asp Gly Leu Glu Cys Val Pro Thr Gly Gln His Gln
150                               85                               90                               95
151   Val Arg Met Gln Ile Leu Met Ile Arg Tyr Pro Ser Ser Gln Leu Gly
152                               100                               105                               110
153   Glu Met Ser Leu Glu Glu His Ser Gln Cys Glu Cys Arg Pro Lys Lys
154       115                               120                               125
155   Lys Asp Ser Ala Val Lys Pro Asp Ser Pro Arg Pro Leu Cys Pro Arg
156       130                               135                               140
157   Cys Thr Gln His His Gln Arg Pro Asp Pro Arg Thr Cys Arg Cys Arg
158       145                               150                               155                               160
159   Cys Arg Arg Arg Ser Phe Leu Arg Cys Gln Gly Arg Gly Leu Glu Leu
160                               165                               170                               175
161   Asn Pro Asp Thr Cys Arg Cys Arg Lys Leu Arg Arg
162       180                               185
163 <210> SEQ ID NO 7
164 <211> LENGTH: 228
165 <212> TYPE: PRT
166 <213> ORGANISM: Homo sapiens
167 <400> SEQUENCE: 7
168   His Asn Arg Glu Gln Ala Asn Leu Asn Ser Arg Thr Glu Glu Thr Ile
169       1                               5                               10                               15
170   Lys Phe Ala Ala Ala His Tyr Asn Thr Glu Ile Leu Lys Ser Ile Asp
171       20                               25                               30
172   Asn Glu Trp Arg Lys Thr Gln Cys Met Pro Arg Glu Val Cys Ile Asp
173       35                               40                               45
174   Val Gly Lys Glu Phe Gly Val Ala Thr Asn Thr Phe Phe Lys Pro Pro
175       50                               55                               60
176   Cys Val Ser Val Tyr Arg Cys Gly Gly Cys Cys Asn Ser Glu Gly Leu
177       65                               70                               75                               80
178   Gln Cys Met Asn Thr Ser Thr Ser Tyr Leu Ser Lys Thr Leu Phe Glu
179       85                               90                               95
180   Ile Thr Val Pro Leu Ser Gln Gly Pro Lys Pro Val Thr Ile Ser Phe
181       100                               105                               110
182   Ala Asn His Thr Ser Cys Arg Cys Met Ser Lys Leu Asp Val Tyr Arg
183       115                               120                               125
184   Gln Val His Ser Ile Ile Arg Arg Ser Leu Pro Ala Thr Leu Pro Gln
185       130                               135                               140
186   Cys Gln Ala Ala Asn Lys Thr Cys Pro Thr Asn Tyr Met Trp Asn Asn
187       145                               150                               155                               160
188   His Ile Cys Arg Cys Leu Ala Gln Glu Asp Phe Met Phe Ser Ser Asp
189       165                               170                               175
190   Ala Gly Asp Asp Ser Thr Asp Gly Phe His Asp Ile Cys Gly Pro Asn
191       180                               185                               190
192   Lys Glu Leu Asp Glu Glu Thr Cys Gln Cys Val Cys Arg Ala Gly Leu
193       195                               200                               205
194   Arg Pro Ala Ser Cys Gly Pro His Lys Glu Leu Asp Arg Asn Ser Cys

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RAW SEQUENCE LISTING
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195          210          215          220
196      Gln Cys Val Cys
197      225
198 <210> SEQ ID NO 8
199 <211> LENGTH: 197
200 <212> TYPE: PRT
201 <213> ORGANISM: Homo sapiens
202 <400> SEQUENCE: 8
203      Met Asp Ser Arg Ser Ala Ser His Arg Ser Thr Arg Phe Ala Ala Thr
204          1          5          10          15
205      Phe Tyr Asp Ile Glu Thr Leu Lys Val Ile Asp Glu Glu Trp Gln Arg
206          20          25          30
207      Thr Gln Cys Ser Pro Arg Glu Thr Cys Val Glu Val Ala Ser Glu Leu
208          35          40          45
209      Gly Lys Ser Thr Asn Thr Phe Phe Lys Pro Pro Cys Val Asn Val Phe
210          50          55          60
211      Arg Cys Gly Gly Cys Cys Asn Glu Glu Ser Leu Ile Cys Met Asn Thr
212          65          70          75          80
213      Ser Thr Ser Tyr Ile Ser Lys Gln Leu Phe Glu Ile Ser Val Pro Leu
214          85          90          95
215      Thr Ser Val Pro Glu Leu Val Pro Val Lys Val Ala Asn His Thr Gly
216          100          105          110
217      Cys Lys Cys Leu Pro Thr Ala Pro Arg His Pro Tyr Ser Ile Ile Arg
218          115          120          125
219      Arg Ser Ile Gln Ile Pro Glu Glu Asp Arg Cys Ser His Ser Lys Lys
220          130          135          140
221      Leu Cys Pro Ile Asp Met Leu Trp Asp Ser Asn Lys Cys Lys Cys Val
222          145          150          155          160
223      Leu Gln Glu Glu Asn Pro Leu Ala Gly Thr Glu Asp His Ser His Leu
224          165          170          175
225      Gln Glu Pro Ala Leu Cys Gly Pro His Met Met Phe Asp Glu Asp Arg
226          180          185          190
227      Cys Glu Cys Val Cys
228          195
229 <210> SEQ ID NO 9
230 <211> LENGTH: 13
231 <212> TYPE: PRT
232 <213> ORGANISM: Orf virus
233 <220> FEATURE:
234 <221> NAME/KEY: UNSURE
235 <222> LOCATION: (2)
236 <223> OTHER INFORMATION: Any amino acid
237 <220> FEATURE:
238 <221> NAME/KEY: UNSURE
239 <222> LOCATION: (4)..(7)
240 <223> OTHER INFORMATION: Any amino acid
241 <220> FEATURE:
242 <221> NAME/KEY: UNSURE
243 <222> LOCATION: (10)
244 <223> OTHER INFORMATION: Any amino acid

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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VERIFICATION SUMMARY
PATENT APPLICATION US/09/431,888A

DATE: 02/23/2000
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Line ? Error/Warning

Original Text

249 W "N" or "Xaa" used: Feature required

Pro Xaa Cys Xaa Xaa Xaa Xaa Arg Cys Xaa G